

## **Modular Notebook and PDA Computer Systems for Personal Computing and Wireless Communications**

### **ABSTRACT**

5        A small light weight modular microcomputer based computer and communications systems,  
designed for both portability and desktop uses. The systems make use of a relative large flat panel  
display device assembly (2), an expandable hinge device (10), battery power source (9), keyboard  
assembly (16), and wireless communications devices (32, 51). The systems are capable of  
10        bi-directional realtime communications of voice, audio, text, graphics and video data. Both  
wire-based or wireless communications methods and devices are implemented. Wireless  
communications devices may include one or more telephone-like handsets (14) and/or earset (34).  
The wireless communication devices may include one or more antennae (32). Systems can be  
configured in a portable arrangement similar to conventional notebook computers, but can be  
quickly and easily disassembled and re-assembled for office desktop uses. Systems may consist of  
15        a base computer unit (100) comprising wireless communication devices may act as a relay station  
relaying voice and other data between the handset or earset and external wide area  
communications networks. The system may be capable of performing, personal digital assistant  
(PDA), cellular telephone, conventional notebook computer, desktop computer functions.